

## Effects of Salinity Stress on Growth of *Pluchea indica* (L.) Less. Seedlings *In Vitro* Culture

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### Abstract

This study investigated the different strength (full, 1/2, 1/4, 1/8 and 1/16) of Murashige and Skoog (MS) medium and different concentrations of sodium chloride (NaCl) supplemented into medium on the seedling growth and development of Chinese medicinal plant *Pluchea indica* (L.) Less. to examine the responses of salinity stress. Quarter-strength MS medium was proven suitable for the relative growth of germinated seedlings, a total increase of 5.63 cm within three months of culture *in vitro*. And an adversative effect of seedling elongation was observed with the highest (Full MS) and lowest (1/16MS) medium inorganic salt strength. Plants were seriously inhibited with the increasing salinity stress, the shoot length, leaf number, leaf area and rooting number decreased significantly in an imitated high salt environment. These results demonstrate that *P. indica* young seedlings on the salt tolerance is still a certain limit even though it is considered a halophyte plant.

Key words: Chinese medicinal plant, Salinity stress, *Pluchea indica*

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